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EXAMINER

HARPER, V PAUL

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/053,777	Applicant(s) CALDWELL ET AL.	
	Examiner V. Paul Harper	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 7, 12, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Montgomery (UK Patent Application GB 2183880 A), hereinafter referred to as Montgomery in view of Iwamida (U.S. Patent 5,839,109), hereinafter referred to as Iwamida.

Regarding **claim 1**, Montgomery discloses a speech translator for the deaf. Montgomery's invention includes the following:

- a modem that connects with the network to convey information to, and receive information from the network (Fig. 6, and Fig. 7, **DATA/VOICE LINE INT**; Fig. 8);
- a subscriber terminal having an interface that enables communication with the modem (Figs. 6 and 7. p. 2, lines 93-114, Speech translator for the deaf (STD) connected to modem),
- a display interface that communicates with a visual display device to display information (p. 1, lines 25-30, STD text is displayed; Fig. 3, item 7),
- a telephone interface that enables communication with a telephone to convey voice information of a user (Figs. 6, 7 and 8), and

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- a buffer that receives and stores speech information (Fig. 3, item 5; p. 1, lines 105-111; recognition requires 40 to 150 small parts of speech, inherently requiring buffering); and
- a processor to decode and display on the display device speech information as text ... upon receipt of speech information from the network (p. 1, lines 105-124; Fig. 3, items 5, 6 and 7; recognizer produces symbolic text which is displayed).

But Montgomery does not specifically teach “a processor to decode and display on a display device speech information **as text in the form of words**”

However, the examiner contends that this concept was well known in the art, as taught by Iwamida.

In the same field of endeavor, Iwamida discloses a speech recognition apparatus capable of recognizing sounds in addition to spoken words and displaying the same for viewing. In addition, Iwamida teaches the displaying of spoken words in the form of text (col. 4, lines 15-22, spoken messages are recognized, such as “Good Morning”; col. 5, lines 45-55, words are displayed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Iwamida, because it is well known in the art at the time of invention for the purpose of assisting a hearing impaired individual carry out a conversation (Iwamida, col. 1, lines 47-56) by presenting messages necessary for daily life (Iwamida, col. 4, lines 17-20).

Regarding **claim 7**, Montgomery discloses a speech translator for the deaf.

Montgomery's invention includes the following steps:

- Receiving at a broadband telephony interface speech packets destined for an individual (Figs. 6, 7 and 8, **DATA/VOICE LINE INT**; the connection to the deaf user's home can be over a voice/data lines such as LADT or ISDN [which supports speech packets] with the appropriate interface; p. 2, lines 100-104);
- storing the speech packets in a buffer (Fig. 3, item 5; p. 1, lines 105-111; recognition requires 40 to 150 small parts of speech, inherently requiring buffering); and
- processing the speech packets to display textual representations thereof ... on a display device (p. 1, lines 105-124; Fig. 3, items 5, 6 and 7; recognizer produces symbolic text which is displayed).

But Montgomery does not specifically teach "processing the speech packets to display textual representations thereof **as words** on a display device." However, the examiner contends that this concept was well known in the art, as taught by Iwamida.

In the same field of endeavor, Iwamida discloses a speech recognition apparatus capable of recognizing sounds in addition to spoken words and displaying the same for viewing. In addition, Iwamida teaches the displaying of spoken words in the form of text (col. 4, lines 15-22, spoken messages are recognized, such as "Good Morning"; col. 5, lines 45-55, the set of words are displayed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Iwamida, because it is well known in the art at the time of

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invention for the purpose of assisting a hearing impaired individual carry out a conversation (Iwamida, col. 1, lines 47-56) by presenting messages necessary for daily life (Iwamida, col. 4, lines 17-20).

Regarding **claim 12**, Montgomery discloses a speech translator for the deaf.

Montgomery's invention includes the following:

- a network interface that enables communication with the network (p. 2, lines 100-115; Fig. 8, **DATA/VOICE LINE INT**);
- a subscriber terminal that communicates information with the network interface a display device, and a telephone device (Fig. 8, shows terminal with display and telephone); and
- a processor that decodes and displays speech information as text ... on the display device during receipt of real time speech information from the network (p. 1, lines 105-124; Fig. 3, items 5, 6 and 7; recognizer produces symbolic text which is displayed) and
- encodes and transmits speech information to the network when speech information is received from the telephone (Fig. 8; Fig. 3, item 1, **MICROPHONE, TELEPHONE INTERFACE**).

But Montgomery does not specifically teach the use of "a processor that decodes and displays speech information as text **in the form of words** on the display device." However, the examiner contends that this concept was well known in the art, as taught by Iwamida.

In the same field of endeavor, Iwamida discloses a speech recognition apparatus capable of recognizing sounds in addition to spoken words and displaying the same for viewing. In addition, Iwamida teaches the displaying of spoken words in the form of text (col. 4, lines 15-22, spoken messages are recognized, such as "Good Morning"; col. 5, lines 45-55, the set of words are displayed).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Iwamida, because it is well known in the art at the time of invention for the purpose of assisting a hearing impaired individual carry out a conversation (Iwamida, col. 1, lines 47-56) by presenting messages necessary for daily life (Iwamida, col. 4, lines 17-20).

Regarding **claim 17**, this claim has limitations similar to claim 7 and is rejected for the same reasons.

2. Claims 2, 8, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Iwamida and further in view of Comerford et al. (U.S. Patent 6,107,935), hereinafter referred to as Comerford.

Regarding **claim 2**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 1). But Montgomery does not specifically teach the following: "a memory that stores voice patterns, and wherein said processor further

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includes a speech analyzer that recognizes an incoming voice pattern based on information stored in the memory.” However, the examiner contends that this concept was well known in the art, as taught by Comerford.

In the same field of endeavor, Comerford discloses a speaker and speech recognition system. Comerford’s system includes a speaker recognition module with stored voice patterns where a speaker’s utterance is compared with existing data (Fig. 1 and 2; col. 3, lines 55-65; col. 4, lines 15-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida by specifically providing the features, as taught by Comerford, because it is well known in the art at the time of invention for the purpose of accurately identifying the speaker of an utterance (Comerford, col. 1, lines 10-60), which is of particular value to a deaf user.

Regarding **claim 8**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 7). But Montgomery does not specifically teach the following:

- a) storing speech patterns in a database, and
- b) analyzing and comparing incoming speech obtained by processing the speech packets with speech patterns stored in the database in order to provide speaker identification capability. However, the examiner contends that these concepts were well known in the art, as taught by Comerford.

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In the same field of endeavor, Comerford discloses a speaker and speech recognition system. Comerford's system includes a speaker recognition module with stored voice patterns where a speaker's utterance is compared with existing data, a) above (Fig. 1 and 2, stored speech patterns for speakers, created during training, col. 4, lines 15-25, a), above; col. 3, lines 55-65, speaker identification performed, b), above).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida by specifically providing the features, as taught by Comerford, because it is well known in the art at the time of invention for the purpose of accurately identifying the speaker of an utterance (Comerford, col. 1, lines 10-60), which is of particular value to a deaf user.

Regarding **claim 18**, this claim has limitations similar to claim 8 and is rejected for the same reasons.

3. Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Comerford.

Regarding **claim 13**, Montgomery discloses a speech translator for the deaf. Montgomery's invention includes the following:

- a subscriber terminal having a network interface that enables communication with a network (Figs. 6 and 7. p. 2, lines 93-114, Speech translator for the deaf (STD) connected to modem),

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- a display interface that communicates with a visual display device to display textual information (p. 1, lines 25-30, STD text is displayed; Fig. 3, item 7), and
- a telephone interface that enables communication with a telephone to convey voice information of a user (Figs. 6, 7 and 8),,
- said subscriber terminal including a processor utilizing a speech buffer to receive at least one of streamed and real time speech information and to decode and display speech information as text on the display device during receipt of speech information from the network (Fig. 3, items 5, 6 and 7; p. 1, lines 105-124; small parts of speech with inherent buffering converted to symbolic text which is displayed).

But Montgomery does not specifically teach “a database that enables identification of a prior caller based on speech segments stored in a database.”

However, the examiner contends that this concept was well known in the art, as taught by Comerford.

In the same field of endeavor, Comerford discloses a speaker and speech recognition system. Comerford's system includes a speaker recognition module with a database of stored voice patterns where a speaker's utterance is compared with existing data (Fig. 1 and 2; col. 3, lines 55-65; col. 4, lines 15-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Comerford, because it is well known in the art at the time of invention for the purpose of accurately identifying the speaker of an utterance (Comerford, col. 1, lines 10-60), which is of particular value to a deaf user.

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4. Claims 4 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Iwamida and further in view of Comerford and Saindon et al. (U.S. Patent Application Publication 2002/0161579 A1), hereinafter referred to as Saindon.

Regarding **claim 4**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 1). But Montgomery does not specifically teach "said subscriber terminal includes a speech database for storing speech segments identified with certain users, and said processor accesses said database to **identify users** according to matches between speech segments received in real time and stored in the database." However, the examiner contends that this concept was well known in the art, as taught by Comerford.

In the same field of endeavor, Comerford discloses a speaker and speech recognition system. Comerford's system includes a speaker recognition module with stored voice patterns where a speaker's utterance is compared with existing data (Fig. 1 and 2; col. 3, lines 55-65; col. 4, lines 15-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida by specifically providing the features, as taught by Comerford, because it is well known in the art at the time of invention for the purpose of accurately identifying the speaker of an utterance (Comerford, col. 1, lines 10-60), which is of particular value to a deaf user.

Furthermore, Comerford does not specifically teach "said processor accesses said database to ... **display an identity of users.**" However, the examiner contends that this concept was well known in the art, as taught by Saindon.

In the same field of endeavor, Saindon discloses a system for automated audio transcription, translation, and transfer, where the names of the speakers are displayed with the text transcription of their spoken audio (¶s[0130] and [0012]; Figs. 2 and 4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida and Comerford by specifically providing the features, as taught by Saindon, because it is well known in the art at the time of invention for the purpose of keeping track of who spoke a particular utterance which is of particular value to a deaf user.

Regarding **claim 19**, Montgomery in view of Iwamida and Comerford teaches everything claimed, as applied above (see claim 18), but Montgomery does not specifically teach using "instructions for displaying an indication of a speaker identity of a speaker associated with ones of the displayed textual representations." However, the examiner contends that this concept was well known in the art, as taught by Saindon.

In the same field of endeavor, Saindon discloses a system for automated audio transcription, translation, and transfer, where the names of the speakers are displayed with the text transcription of their spoken audio (¶s[0130] and [0012]; Figs. 2 and 4).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida and

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Comerford by specifically providing the features, as taught by Saindon, because it is well known in the art at the time of invention for the purpose of keeping track of who spoke a particular utterance which is of particular value to a deaf user.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Comerford and further in view of Dietz (U.S. Patent 6,175,820), hereinafter referred to as Dietz.

Regarding **claim 15**, Montgomery discloses a speech translator for the deaf. Montgomery's invention includes the following steps:

- receiving real time speech information (p. 1, lines 27-29; speech sounds coming in over the telephone connection);
- converting the real time speech information into text (p. 1, lines 27-32; speech to symbolic text).

But Montgomery does not specifically disclose "analyzing the speech information to determine identity of a caller based on previously stored speech segments."

However, the examiner contends that this concept was well known in the art, as taught by Comerford.

In the same field of endeavor, Comerford discloses a speaker and speech recognition system. Comerford's system includes a speaker recognition module with stored voice patterns where a speaker's utterance is compared with existing data (Fig. 1 and 2; col. 3, lines 55-65; col. 4, lines 15-22).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Comerford, because it is well known in the art at the time of invention for the purpose of accurately identifying the speaker of an utterance (Comerford, col. 1, lines 10-60) of particular value for a deaf user.

Furthermore, Montgomery does not teach "displaying a textual representation of the speech including punctuation, obtained as a result of the analyzing step." However, the examiner contends that this concept was well known in the art, as taught by Dietz.

In the same field of endeavor, Dietz discloses a device for capturing voice dynamics to enhance speech-to-text. Dietz's system captures speech (Fig. 4, item 402), analyzes inflection, tone, and other speech dynamics (col. 5, lines 57-60) and is capable of determining some punctuation (col. 5, lines 54-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Dietz, because it is well known in the art at the time of invention for the purpose of enhancing the value of speech-to-text conversion by including text marked with punctuation (Dietz, col. 2, lines 39-47).

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Comerford, Iwamida, and further in view of Dietz.

Regarding **claim 16**, this claim has limitations that are similar to claim 15 (rejected with Montgomery in view of Comerford and Dietz), and the corresponding limitations are rejected for the same reasons. But Montgomery does not specifically teach “analyzing the speech information to determine ... **at least one** of gender, soft-spoken words, hard-spoken words, shouting, laughter, **or human expression**.” However, the examiner contends that this concept was well known in the art, as taught by Iwamida.

In the same field of endeavor, Iwamida discloses a speech recognition apparatus capable of recognizing signals other than spoken words and displaying them for viewing (title). These sounds include a human expression (col. 4, lines 43-47, a baby crying) and are analyzed by a time series of frequency feature parameters (col. 3, lines 50-57, which necessarily includes tonal variations).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Iwamida, because it is well known in the art at the time of invention for the purpose of presenting a broader range of sound information, which would be of particular value to a hearing impaired person (Iwamida, col. 2, lines 13-17; col. 6, lines 32-36) when trying to determine the emotional content of an utterance (Iwamida, col. 4, lines 17-22, a baby’s crying).

7. Claims 5, 6, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Iwamida and further in view of Engelke et al. (U.S. Patent 6,075,842), hereinafter referred to as Engelke.

Regarding **claim 5**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 1). In addition, Montgomery teaches the use of a keypad for entering commands to **control functions within the system**, including commands in the DTMF format (p. 2, lines 8-15; Fig. 3, items 4, 6, 9, 10, 11, and 12), but Montgomery does not specifically teach "said processor includes a detector that responds to subscriber inputs to **activate and deactivate speech recognition**." However, the examiner contends that this concept was well known in the art, as taught by Engelke.

In the same field of endeavor, Engelke discloses a method for text enhanced telephony. Engelke's method supports the extraction and display of coded text signals and includes a **bypass circuit to disable the text processing circuitry** (Fig. 1, item 40; col. 4, lines 57-61).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida by expanding the DTMF control functions to include the ability to enable and disable the speech processing, as taught by Engelke, because it is well known in the art at the time of invention for the purpose of saving power when the additional processing is not required as when a normal hearing person is using the system.

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Regarding **claim 6**, Montgomery in view of Iwamida and Engelke teaches everything claimed, as applied above (see claim 5); in addition, Montgomery teaches "said detector comprises a DTMF tone detector and said user inputs comprise DTMF tones of a telephone" (see claim 5 rejection).

Regarding **claim 11**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 7), but Montgomery does not specifically teach "responding to a command from the subscriber to activate and deactivate speech processing." However, the examiner contends that this concept was well known in the art, as taught by Engelke.

In the same field of endeavor, Engelke discloses a method for text enhanced telephony. Engelke's method includes the extraction and display of coded text signals and includes a bypass circuit to disable the text processing circuitry (Fig. 1, item 40; col. 4, lines 57-61).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery in view of Iwamida by specifically providing the features, as taught by Engelke, because it is well known in the art at the time of invention for the purpose of saving power when the additional processing is not required; for example, when a normal hearing person was using the system.

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8. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Montgomery in view of Iwamida and further in view Dietz.

Regarding **claim 20**, Montgomery in view of Iwamida teaches everything claimed, as applied above (see claim 17). But Montgomery does not specifically teach the use of "instructions for analyzing characteristics of incoming speech obtained by processing the speech packets and insetting punctuation in the displayed textual representations thereof in response to the analysis. However, the examiner contends that this concept was well known in the art, as taught by Dietz.

In the same field of endeavor, Dietz discloses a device for capturing voice dynamics to enhance speech-to-text. Dietz's system captures speech (Fig. 4, item 402), analyzes inflection, tone, and other speech dynamics (col. 5, lines 57-60) and is capable of determining some punctuation (col. 5, lines 54-60).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Montgomery by specifically providing the features, as taught by Dietz, because it is well known in the art at the time of invention for the purpose of enhancing the value of speech-to-text conversion by including text marked with punctuation (Dietz, col. 2, lines 39-47).

Regarding **claim 21**, Montgomery in view of Iwamida and Dietz teaches everything claimed, as applied above (see claim 20). In addition, Dietz teaches "the

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characteristics include at least one of changes in tone, volume, or inflection" (see rejection of 21; Dietz, col. 5, lines 57-60).

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are either not persuasive or moot in view of the new ground(s) of rejection. Only the arguments directed to the unamended claims will be addressed below.

9. Applicant asserts on page 8:

Claim 2 depends from claim 1 and further recites that the processor further includes a speech analyzer that recognizes an incoming voice pattern based on information stored in a memory. On page 5 of the Office Action, the Examiner admitted that Montgomery fails to disclose or suggest this feature. The Examiner relied on Comerford to disclose this feature. On page 5 of the Office Action, the Examiner asserted that the suggestion or motivation to combine Montgomery with Comerford is "... because it is well known in the art at the time of the invention for the purpose of accurately identifying a speaker of an utterance, which is of particular value to a deaf user." *Applicants disagree with the suggestion or motivation provided by the Examiner and submit that there is no suggestion or motivation to combine the references.* (Italics added)

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

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Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the ability for a deaf person to be able to identify a caller has obvious benefits since without this feature there is no way for the deaf person to confidently know who he or she is conversing with (see rejections of claim 2, 8, and 18).

Applicant asserts on page 9:

Comerford relates to systems and methods for selectively permitting access by a requesting speaker to a service or a facility (see Abstract). Thus, Comerford discloses using speaker recognition in order to determine whether to permit the speaker to have access to the facility or the service.

The teachings of Comerford related to speaker identification (Fig. 1) and the broadly useful benefits of such identification (col. 1, lines 10-60) were used in the rejections, not necessary all of Comerford's applications.

10. Applicant asserts on page 9:

Applicants submit that because Montgomery discloses using a device to carry on a conversation between only two people, *there would be no need, and therefore, no motivation to combine the references to provide a device that performs speaker recognition or identification*. When using the invention of Montgomery, each user would recognize their own portion of the conversation displayed on a display device. Further, each person would know that the conversation is with only one other person and that any conversation that is displayed in symbolic text that did not originate from the speaker, must be from the one and only other party. (Italics added)

The examiner maintains that there is nothing in Montgomery that precludes the "hearing party" (in Fig. 1) from handing the phone to another person during the

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conversation which is a well known and common occurrence (e.g., a call from family members during the holidays). There is also the need for the deaf party to initially establish the identity of the calling party, and finally it is certainly a possibility that the deaf party could be involved in a conference call where knowledge of the originator of a particular utterance would very useful.

11. Applicants assert on page 10:

On page 8 of the Office Action, the Examiner admitted that Comerford does not disclose or suggest a processor accessing the database to display the identity of users. The Examiner relied on Saindon to disclose or suggest this feature.

In the previous office action, starting on line 11 of page 8, it is stated that "Comerford's system includes a speaker recognition module with stored voice patterns where a speaker's utterance is compared with existing data (Figs. 1 and 2: col. 3, lines 55-65; col. 4, lines 15-22)."

12. Applicant further asserts on page 10:

Applicants submit that there is no motivation to combine Montgomery with Comerford for at least the reasons provided with respect to claims 2, 8 and 13. Saindon relates to systems and method for converting spoken audio to text and transferring the text to a user (see S 'atndon, at paragraph [00020]). The speech or text may be translated into other languages. Saindon discloses that the spoken audio may be from a conference or movie (see Saindon, at Figs. 1, 2 and 4). Applicants submit that because more than two parties may be communicating using the invention of Saindon, speaker identification is useful to keep track of who said what. *However, Montgomery discloses a system or method by which*

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one person communicates with only one other person. Therefore, as mentioned above with respect to the rejection of claims 2, 8 and 13, a user of the Montgomery system would have no need to identify a speaker. Therefore, one of ordinary skill in the art would not have a motivation to combine Montgomery, Comerford and Saindon. (Italics added)

See the discussion in §10, above.

13. Applicants assert on page 11:

Applicants submit that Dietz does not disclose or suggest analyzing speech information to determine an identity of a caller based on previously stored speech segments, as required by claim 15. Applicants further submit that the combination of Montgomery and Dietz or the combination of Comerford and Dietz, does not disclose or suggest all of the features of claim 15. Therefore, Applicants respectfully request that the rejection of claim 15 be withdrawn. (Italics added)

As stated in the rejection of claim 15, Comerford teaches speaker identification based on stored voice patterns (Fig. 1, see rejection of claim 15).

14. Applicants assert on page 13:

Engelke relates to a text enhanced telephony device. The device of Engelke requires a human being to convert spoken words to text (see Abstract and col. 5, lines 13-17) and consequently, does not disclose decoding speech information as text in a form of words. Therefore, Engelke fails to satisfy the deficiencies of Montgomery. Applicants submit that claims 5 and 6 are patentable over Montgomery in view of Engelke and respectfully request that the rejection be withdrawn.

Engelke teaches the use of a bypass circuit to disable text circuitry (Fig. 1, item 40: col. 4, lines 56-61), and as stated in the current rejection of the amended claims 1

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and 7, Iwamida teaches the decoding of speech information as text in the form of words (see rejections; Iwamida, col. 4, lines 15-22; col. 5, lines 45-55).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

06/10/2005

V. Paul Harper
Patent Examiner
Art Unit 2654



RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER